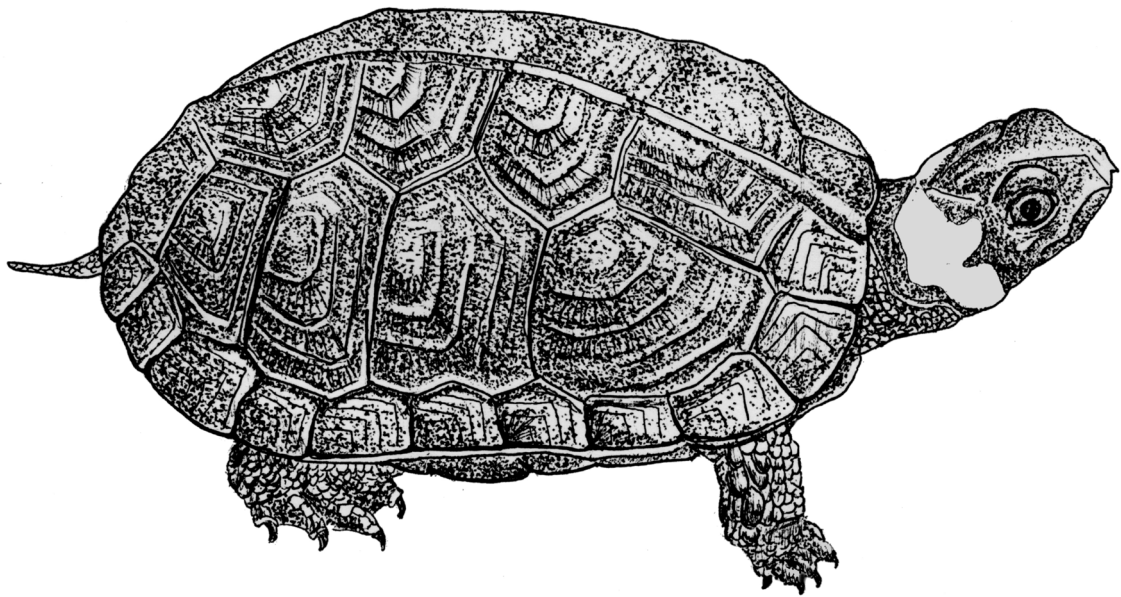


Virginia's Wildlife Species Profile



Bog Turtle

Clemmys muhlenbergii (Schoepff)

Status: State Endangered

Federal Threatened (s/a)

Virginia Department of Game and Inland Fisheries
Wildlife Diversity Division
Nongame and Endangered Wildlife Program
4010 West Broad Street
P.O. Box 11104
Richmond, VA 23230-1104
804-367-8999



Wildlife Diversity Biologists
(I) Williamsburg: 757-253-7072
(II) Forest: 804-525-7522
(III) Blacksburg: 540-951-7923
(IV) Verona: 540-248-9360
(V) Fredericksburg: 540-899-4169

www.dgif.state.va.us

Support Virginia's Nongame Wildlife Program!

Remember the Nongame Wildlife Tax Checkoff as you do your Virginia state income taxes this year.

Virginia's Wildlife Species Profile: Bog Turtle

Virginia Distribution: Southern Blue Ridge Plateau

Characteristics

The bog turtle is the smallest and rarest freshwater turtle in North America. Adult shell length averages 3-3¹/₄ inches, reaching a maximum of 4¹/₂ inches. The carapace is brown to black in color; and though rough in young, it may be smooth in adults. In adults, the plastron is black with blotches of yellow along the midline, but the plastron of juveniles is yellow with a large, black central blotch. The skin of the neck, head, and limbs is brown to pinkish-brown. A conspicuous orange, yellow, or red blotch lies behind each eye. Males have a concave plastron and a longer tail than females; females have a flattened plastron, a higher and wider carapace, and a shorter tail than males.

Feeding

Bog turtles are omnivorous, eating both plants and animals. They usually forage in the morning and in late afternoon. Not known to be picky eaters, their diet includes a wide variety of tadpoles, crayfish, insects, millipedes, earthworms, slugs, snails, blackberries, strawberries, duckweed, and the seeds of pondweed and sedges.

Habitat and Distribution

Bog turtles live in open freshwater wetlands characterized by boggy meadows and pastures along slow-moving streams, springs, and seeps within the mountainous landscapes of the southern Blue Ridge Plateau. In Virginia, they are documented only from Carroll, Floyd, Grayson, and Patrick counties.

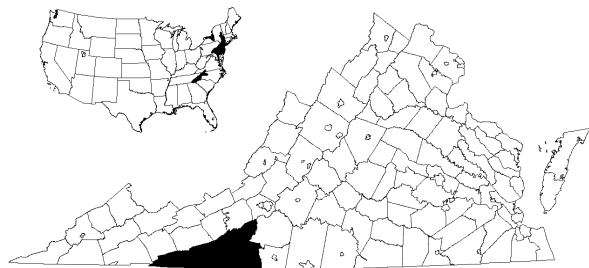


Figure 1. Bog turtle distribution in Virginia and the United States.

Bog turtles are most active during late spring and early summer. When not foraging, they often bask in the sun on mats of grass or in shallow water. To avoid predators and mid-summer heat, they burrow deep into the wetland mud. During winter, they hibernate below the frost zone in holes, muskrat burrows, clumps of sedges, or mud.

FACT: Twenty-two species of turtles are native to Virginia. Eight of these, including all 5 species of sea turtles, are listed as endangered or threatened.

Reproduction

Maturity of both males and females is reached at six years of age. Mating occurs from late April to early June, and eggs are laid from May to July in grass, moss, or soft soils. Three to five eggs are laid per nest. Most hatching occurs in August, but some young turtles do not emerge until October, or even the following April or May.

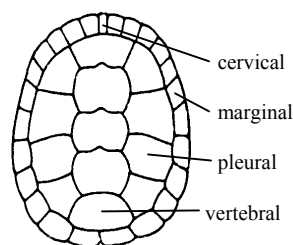
Threats

Bog turtles are preyed upon by raccoons, skunks, opossums, foxes, dogs, and some birds. These predators eat eggs, juveniles, and even adult turtles, which often are found with gnawed shells and missing limbs.

The bog turtle faces several threats to its survival. Many are accidentally killed on roadways each year. Unlawful capture and sale of bog turtles is a significant problem, as this species is popular in the illegal pet trade. Habitat loss or degradation from wetland drainage for urban or agricultural development poses a continuing threat. Because of these concerns, bog turtles were placed on Virginia's endangered species list in October 1987. Northern state populations of this species were listed as threatened by the U.S. Fish and Wildlife Service in 1997. In that rulemaking, Virginia's population was federally listed as threatened by similarity of appearance (s/a).

Morphology: The Turtle Shell

Carapace - top



Plastron - belly

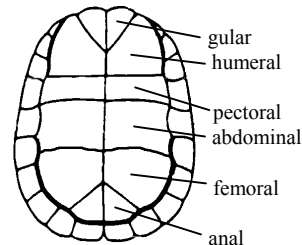


Figure 2. Generalized turtle shell.

The turtle's upper shell is known as the carapace. This provides the turtle with protection from predators and harsh environmental conditions. The lower shell is called the plastron. Most turtles can be identified by the arrangement, pattern, or shape of the scutes (divisions of the shell).

For additional information, consult *A Guide to Endangered and Threatened Species in Virginia* by K Terwilliger and JR Tate or *Reptiles of Virginia* by Joseph C Mitchell.

Citation: McGregor MA. 1999. Bog turtle: *Clemmys muhlenbergii* (Schoepff). Virginia's wildlife species profile No. 030061.1 (Fernald RT, series editor). Richmond: Virginia Department of Game & Inland Fisheries. (The bog turtle illustration on the front cover is by Michael J Pinder.)